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## THESIS

**EFFECTS OF MARITAL/DEPENDENCY STATUS  
ON REENLISTMENT BEHAVIOR OF  
SECOND-TERM ENLISTED FEMALES**

by

Laura Nell Edwards

December 1989

Thesis Advisor:

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**Effects of Marital/Dependency Status on  
Reenlistment Behavior of Second-Term Enlisted Females**

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Submitted in partial fulfillment of the  
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## ABSTRACT

This thesis investigates the relationship of reenlistment decisions of second-term enlisted women in the military to their marital and dependent status, using individual-level data from the 1985 DoD Survey of Officer and Enlisted Personnel. Actual reenlistment status (December 1988) of each survey respondent was merged with the data set. Logit analysis was used to estimate the likelihood of a respondent choosing to reenlist given her set of individual characteristics. Separate logit models were estimated for the following groups of second-term personnel: single women without children, single women with children, married women without children, and married women with children. Certain variables affected all groups similarly (pay grade, minority status, perception of civilian job alternatives). Others exerted differential impact on subgroups (job satisfaction, traditionality of job). Results illustrated differential reenlistment behavior based upon the presence of children. Results may be used to target reenlistment incentives for specified marital/dependent status groups.

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## **I. INTRODUCTION**

### **A. OVERVIEW**

This thesis investigates the relationship of reenlistment decisions of enlisted women in the military to their marital and dependent status. The military has, for the past quarter of a century, been a leader in instigating change in the occupational roles of women. Initially, women were integrated into specific military jobs during national emergencies such as World Wars I and II. After these crises passed, the jobs held by women were either disestablished or returned to the men who had held them previously. Breakthroughs in the use of women in uniform were normally the result of economic or practical necessity. However, precedents were set and women continued to prove that they could operate successfully in all arenas open to them.

Today, the number of women in the military continues to expand, as does the number of women actively participating in the U.S. work force as a whole. Women currently comprise more than 10 percent of the Armed Forces in the Department of Defense. More than 230,000 women serve on active duty in the Army, Air Force, Marine Corps, and Navy, in a wide range of support and direct operating force billets, both in CONUS and overseas. Women contribute significantly to the Armed Forces' high level of readiness and have been credited with much of the success of the All-Volunteer Force (AVF).

Demographic changes in the late 1980s have created multiple constraints to achieving military manpower goals, which could hamper force objectives for the early 1990s. Unstable economic conditions, recruit shortages, and Congressional budget cuts/deficit reduction plans all make it more challenging than ever to staff the AVF properly. Using a "total force" concept for manpower planning, policy makers could utilize women (by recruiting, training, promoting, and retaining more or less as needed) to meet the peacetime and mobilization needs of national defense. The increased use of women presents a viable contingency which is, at this time, readily available to Pentagon planners. Because women are currently demand-constrained (i.e., there are more qualified women available than there are billets for them to fill), the Armed Forces could bring in higher numbers of women to forestall projected personnel shortfalls over the next decade, and conceivably increase the quality of the enlisted force.

The more decision makers know about the behavior of military women, the more informed will be any plans to expand the participation rate of military women to meet total force objectives for efficient use of military labor. Models which capture the reenlistment characteristics of targeted groups could provide a tool for making sound policy decisions.

A woman's decision to either reenlist or leave military service at the end of her obligation depends on many factors. Among them are her level of job satisfaction, type of occupation, and individual characteristics. The military has sustained efforts to open as many occupations as possible to women but has been constrained by prohibitions of service policy or law.

In the case of the young woman's first enlistment, motives for joining the military are similar to men's: fringe benefits and travel, educational enhancement, career opportunities, and job security [Ref. 1]. It has been shown that women who never marry are much more likely to have job tenures equivalent to those of the typical male worker [Ref. 2].

A woman's choice to reenlist can also be influenced by marriage and/or the birth of a child. Although marriage has traditionally been seen as an economic alternative to labor force participation, today's society encourages, if not demands through economic necessity, the two-paycheck household.

Since many married enlisted women have military spouses, there is likely increased impetus to remain on active duty because of camaraderie associated with dual service, because married personnel receive higher pay and benefits, and because the services enjoy a superlative record (greater than 90 percent) for co-locating dual-service couples.

The birth/rearing of a child often has a negative impact on a woman's staying behavior. Cost of child care, real or perceived inability to meet military obligations, societal disapproval of dual child-care/career roles, and personal desires can all negatively affect the mother's retention — she may feel that leaving the service would be in the best interests of her family. The stress of juggling homemaker, parent, and military roles may not be worth the effort. Thus, a mother may drop the role that is socially or psychologically easiest to shed when a decision is required — that of being in the military.

Despite the fact that the incidence of working mothers is at its highest level ever, the military is renowned as a "greedy" institution. Segal [Ref. 3] describes both the military and the family as greedy because "they make great demands of individuals in terms of commitments, loyalty, time, an energy." The professional and familial role conflict this causes is hypothesized to increase turnover significantly.

Among active-duty mothers, none is more controversial than the single parent, who single-handedly juggles professional and child-rearing demands. The issue of single parents in the military elicits heated debate and emotional rhetoric from all involved parties—the upper echelon of military leadership, middle management, even Congressional leadership cannot reach consensus on how to deal with the single parent in the military. Commanding officers have vociferously maintained that single parents are a liability to the mission readiness of their commands, charging that they create extra work and administrative burden for both their co-workers and their command by trying simultaneously to meet their professional and child-rearing obligations single-handedly. Single parents are viewed as not being world-wide assignable or ready to deploy with their unit, and as not having adequate alternate child guardian arrangements.

The Pentagon is currently reviewing both the feasibility and current administration of single parents in the military to find out if they actually do hamper combat or mission readiness. If single parents are determined to affect readiness negatively, existing personnel policies regarding their recruitment and/or reenlistment may be restructured.

This study attempts to describe the staying behavior of second-term military women. Marital and familial status will be isolated to test their effects on reenlistment decisions.

## **B. STRUCTURE OF THE STUDY**

### **1. Database**

The database used for this thesis was the 1985 DoD *Survey of Officer and Enlisted Personnel* [Ref. 4]. This survey is a cross-sectional, stratified sample of active-duty officer and enlisted personnel serving in all branches of the military on 30 September 1984. The initial eligible enlisted sample for the study numbered 70,025, of which 20,045 were female. The 1985 DoD survey was matched by DMDC with 1988 personnel records to obtain information on subsequent staying behavior of respondents. The inclusion of this actual reenlistment data allows a direct comparison of reenlistment intent, as stated in the 1985 survey, to actual reenlistment decisions. To facilitate this analysis, only those original respondents who were within three years of their end of active obligated service (EAOS) were included. As a result, all sample members were eligible to make a reenlistment decision.

### **2. Study Objectives**

This thesis examines an application of economic human capital or "dual career" theory, which attributes gender-related employment differences to marital and child-rearing responsibilities [Ref. 5]. Specifically, this research seeks to determine the relationship of marital/familial status to the reenlistment/turnover behavior of second-term female service members.

### **3. Research Questions**

This paper analyzes the relative importance of demographic, economic, family, and job factors on the reenlistment decisions of four groups of second-term enlisted women:

- single, no children (22.2 percent of sample)
- single with children (12.0 percent of sample)
- married, no children (23.4 percent of sample)
- married with children (42.3 percent of sample)

The central hypothesis is that women without children will behave similarly to males regarding reenlistment decisions. The considerable effort of child rearing, which is still managed primarily by women, often renders single and married women with children unable to maintain both career and family goals. As a result of this conflict, it is hypothesized that women with children will respond differently than women without children regarding reenlistment motivators.

### **4. Scope and Limitations**

This thesis focuses on the predominant marital/familial orientations by which enlisted women can be categorized. There are several limitations to the study. One limitation is that the women of this sample may not be representative of the population of enlisted women who were on active duty in September 1984, because the DoD survey sampled women at a higher rate in order to permit more detailed analysis. Because the sampling plan allowed for disproportionate sampling among women and because different subgroups did not respond to the survey at the same rates, findings should be interpreted with this in mind. With

regard to surveys in general, responses are self-reported, are subjective, and are thereby prone to individual bias.

Another limitation of these data is that they allow only a test of the effects of current (versus past) marital/familial status on current reenlistment intent. Roos [Ref. 6] notes that the relationship between occupational attainment and marital status is complex: fertility and labor force expectations affect initial job choice, which in turn affects subsequent decisions regarding marriage, children, etc. However, since single women with children are not permitted to join the military, and already-married women with children are assumed to be highly unlikely to choose a career as nontraditional as military service, this limitation should not critically flaw the interpretation of results. The actual staying behavior of these second-term women as of December 1988 will be compared to their reenlistment intent at the taking of the survey in March 1985 to determine how closely intent matched four years later with actual reenlistment.

Another limitation of this study is that the database does not include some information which has been shown to affect military women's reenlistment decisions (i.e., intact vs. female-headed household of respondent when growing up or amount of formal or on-the-job training received).

## **5. Methodology**

With individual-level data and dichotomous dependent variable(s) (either "remained on active duty" or "left active duty," logit analysis was selected to estimate models for reenlistment behavior. These models

will be used to estimate the likelihood of a survey respondent reenlisting given her unique set of individual/professional characteristics.

Chapter II will review pertinent literature in both military and civilian applications. Chapter III outlines the structure of the database, models used, and statistical techniques employed. Chapter IV discusses the analysis and results and provides an assessment of the predictive ability of the specified models. Chapter V presents the summary and conclusions of the study and outlines potential policy implications.



## **II. LITERATURE REVIEW**

### **A. INTRODUCTION**

This review provides the theoretical foundation for the models of second-term enlisted female and male reenlistment which are outlined in Chapter III. The framework for this literature review is as follows:

- General research of turnover behavior is presented from economic, sociological, and psychological perspectives to lay the groundwork for assessing the stay/leave decisions of targeted groups of enlisted second-termers.
- A review of pertinent research on the turnover behavior of females (and, for comparison purposes, males) is provided to outline findings on gender-specific reasons for quitting.
- A review of gender-related military turnover is presented to illuminate current theory on the unique factors which may precede quit behavior in military females.

### **B. GENERAL TURNOVER RESEARCH**

For the purposes of this thesis, turnover is defined as the choice made by an individual to leave active duty at the end of obligated service. Turnover is considered a voluntary action and does not include mandatory or medical separations from military service.

The study of turnover behavior is multi-dimensional—it can be viewed from an economic standpoint as a financial or pecuniary decision, a psychological standpoint as a result of personal discontent or unhappiness with various aspects of the job, or from a sociological standpoint as a series of factors inherent in the work environment which cause stress or conflict and eventually result in quitting. Each discipline offers a

partial explanation of quit behavior; used in conjunction they can explain a great deal of the variance in turnover. Turnover studies have consistently shown moderate correlation between quit behavior and attitudinal variables such as satisfaction with specific job attributes and job commitment. Other causes, stemming from social/demographic factors such as minority and/or marital family status, as well as from economic factors, such as income levels and time on the job, also play a role in explaining turnover decisions.

Muchinsky and Tuttle [Ref. 7] reviewed 39 studies of the relationship between job satisfaction and quit behavior and found a consistent negative relationship between the two, indicating that the more an individual dislikes his/her job, the higher the probability of turnover. Mobley [Ref. 8] hypothesized that the psychology of quit behavior is best explained by a chain of events, or "mediating steps" between job dissatisfaction and turnover. Included in this progression are thinking about quitting, comparison of alternatives vs. present job, intention to quit, and actual turnover. McEnvoy and Cascio [Ref. 9] note that organizations wishing to reduce turnover must address issues of recruitment, selection, early socialization practices, job content, compensation, leadership and supervision, career planning and development, benefits, and alternative work schedules.

Economic theory predicts that, if all other factors are controlled, an individual will have a higher probability of quitting a low-paying job than a higher-wage job [Ref. 2:p. 368]. From this human capital viewpoint,

high turnover in an organization can often be attributed to a pay scale which may not be competitive with market alternatives [Ref. 2:p. 369].

Human capital theory also indicates that job turnover falls as job tenure rises. This is attributed to a "job matching" process whereby an employee learns about his or her job only after employment begins. If an employee has made a poor job match, he or she will quit. Those who stay will accrue tenure and believe they have made a wise choice in matching their preferences with their available options. Job tenure can also be due to satisfaction with either the job itself or the amount of training received on the job. Hence, turnover will decrease as tenure increases.

External economic conditions also play a role in an individual's propensity to quit. Michaels and Spector [Ref. 10] found that labor market conditions influence turnover—when alternative jobs are plentiful, workers are more likely to take the risk of quitting their current jobs [Ref. 11:p. 428].

### **C. GENDER-RELATED TURNOVER RESEARCH**

The labor market participation and experience of women have received high current interest for several reasons. First, between now and the year 2000, 65 percent of all entrants to the US work force will be female [Ref. 12:p. 127]. One-fourth of these women will be of minority status [Ref. 13:p. 3]. By 1995, 81.7 percent of all adult women will be in the work force, according to Bureau of Labor Statistics projections [Ref. 13:p. 10] Currently, 75 percent of all women in the US work. One-half of these women are mothers of children aged 18 or less. Currently, there has also been a tremendous rise in the number of single-parent

families— 25 percent of all children under 18 reside in single-parent family homes [Ref. 14:p. 27].

Second, recognizing the unique career/family needs of female workers can reduce turnover in an organization. Those organizations which ignore the unique career needs of women will lose the best and brightest female talent. Significant demographic changes— decline in proportion of single women in the population, long-term drop in the fertility rate, and urbanization— all have contributed to the dramatic rise in the numbers of working wives/mothers [Ref. 15:p. 83].

Shukla, Sarna, and Nigam [Ref. 16] studied sex differences in work attitudes to explore whether employed men and women have differing work values. They found that men valued autonomy, task significance, and variety, and thought their jobs provided greater promotion opportunities. Women perceived their jobs as providing greater pay equity and more comfortable work schedules. They further found that job satisfaction/dissatisfaction is a function of the discrepancy between what is expected/desired from work and what is received. They concluded that males and females are more alike than different in their work attitudes [Ref. 16:p. 74].

Eighty-five percent of women in the US eventually marry and the majority of these women bear children. Adequate day-care, maternity leave, flexible work scheduling, and other types of institutional support are potential methods of eliciting optimal work performance by working mothers. Organizational support for single mothers is essential to their effective work-force participation. Conflict between child-rearing

responsibilities and professional goals can cripple women's attempts for labor market integration. Powell and Posner [Ref. 17] studied males and females at early career stages to determine whether there existed gender differences in commitment to career versus family/home life. They found that women perceived job anxieties as spilling over more into their personal lives and that men were, overall, more committed to their careers than women.

Although many studies indicate that females have higher levels of turnover than males, much of this difference can be explained by both the lower wages paid to women and the interrupted nature of their careers (by pregnancy/child rearing). Blau and Kahn [Ref. 18] state that if lower wages and interrupted careers are controlled for, there is no significant difference between males and females in turnover behavior [Ref. 2:p. 370]. Other research indicates that once children reach school age, working mothers become the most stable of all employees, as they have already endured their most difficult years of managing family and work concerns [Ref. 12:p. 132].

The "traditional" nuclear family unit (father works, mother is a housewife) of the 1950s is no longer representative of the US work force. Indeed, only 15 percent of all American families fit this mold. Today, women work for the same reasons men work—the income generated is needed to support their families [Ref. 19].

Difficulty in obtaining mentors has also been shown to hamper women's career progression in such fields as the military and higher management. Also, stereotypes about the lesser effectiveness of women

as leaders are pervasive, despite little empirical support in the work place [Ref. 20:p. 167].

This thesis attempts to explain the effects of marital/dependency status on second-term enlisted women. To facilitate this analysis, these service members have been subdivided into the following categories:

- single, no children
- single with children
- married, no children
- married with children

There exists much research dedicated specifically to these subgroups of women in the labor force. Pertinent information is presented below.

#### **1. Single Women with No Children**

These women have a total of labor force experience which most closely resembles that of males and should be more likely than other women to work in nontraditional jobs [Ref. 21:p. 853]. Kanter [Ref. 22] states that single women (and married women without children to a somewhat lesser degree) in the enlisted military have significantly greater chance for self-promotion, recognition, and career progression and are more prepared to take on increased tasks, which helps their career and promotion potential. Roos warns, however, that some single women may, in fact, be "premarried," that is, they anticipate marriage as an eventuality and make occupational decisions based on these assumptions [Ref. 6:p. 855]. Single women are more likely to work than married women and are more likely to work full-time. Single women are, on average, younger

than married women. they are also more likely to work in professional jobs than married women; they complete, on average, more years of education than married women [Ref. 6:p. 859]. Roos found, however, that more prestigious jobs and more schooling do not necessarily translate into higher-paying jobs. This occurs because single women are concentrated in different jobs than men—working in “female” occupations rather than in “male” occupations [Ref. 6:p. 862].

## **2. Single and Married Women with Children**

These women have primary responsibilities for child care, and these responsibilities purportedly affect career attainment [Ref. 6:p. 853]. Psychological distress is found to be greater among working mothers of young children. On the positive side, labor market work provides a reprieve from child-care and housekeeping out, as Kessler and McRae note, “time pressure anxieties about role performance, and work overload are probably greater among mothers, and working outside the home could exacerbate these problems.” [Ref. 23:p. 219] Their research also showed that spouse assistance with child-care responsibilities modified the strength of the relationship between working and stress. Mothers without assistance of a spouse received no significant mental health advantage from work outside the home [Ref. 23:p. 220].

Kessler and McRae also tested the effect of family income levels for married women and found a strong positive relationship between earnings and well being that did not exist for the sample males [Ref. 23:p. 225]. Their results suggest that “work” means different things to men and women. The postulate that women are more satisfied with their

level of pay than men, and perhaps that their expectations from work are lower. Differences in level of strain experienced by working mothers may be attributable to men's increasing involvement in child care as women become more involved in their careers [Ref. 24:p. 259].

Lewis and Cooper [Ref. 25] state that powerful normative constraints exist against full-time employment for mothers of small children, and that working mothers internalize these beliefs, even if they are not expressed consciously. Lewis and Cooper also found that mothers exhibit lower work commitment and career aspirations than men but also that fathers also had lower work commitment than other men. Interestingly, they found that mothers reported more job satisfaction than other women. Job dissatisfaction among mothers was explained in large part by the burden of total domestic responsibilities. Fathers, on the other hand, reported greater job dissatisfaction than childless men [Ref. 25:pp. 294-300].

### **3. Married Women Without Children**

Roos postulates that, in industrial societies where female labor force participation is the norm (i.e., the US), the marital responsibilities of females may not play an important role in explaining differences in participation rates [Ref. 6:p. 855].

Although married women without children have a higher tolerance for high work demands than married women with children, women with children suffer work strain less frequently than married women without children. Additionally, married women without children suffer less strain than single women without children [Ref. 24:p. 258]. Lewis



and Cooper found, among nonparents, that role conflict between spouse and employment roles was not significantly associated with job dissatisfaction, anxiety, depression, or life dissatisfaction. This indicates that work-family interference is primarily explained by work-parenting conflicts. Overall, they contend that multiple roles can be satisfying if well managed. Their research suggests that for married women without children, male/female roles within the marriage are most important, whereas practical issues of flexible work schedules and parental leave are paramount to women with children [Ref. 25:p. 300].

#### **D. MILITARY TURNOVER RESEARCH**

A wealth of research exists which examines the costs and benefits of participation of women in the military services.

Warner [Ref. 26] notes that, despite wide-ranging debate, there is little evidence to support productivity differentials by gender. The military women being assessed are generally of higher mental group category than males, and a higher percentage have high-school diplomas, so they may actually contribute more to overall productivity. Yet women have demonstrated lower reenlistment rates than males, which increases their overall cost to the military [Ref. 26:p. 30].

Eitelberg notes that, for both males and females, the decision to either remain on active duty or leave military service may be dependent not only on job satisfaction factors but also on "quality of life" issues [Ref. 14]. He believes that reenlistment decisions are based on an inseparable interaction of career and family concerns. Eitelberg draws attention to some changing demographics in military manpower: in 1968, only 40

percent of all enlistees were married. In 1988, more than 60 percent were married. Segal [Ref. 3:p. 25] notes that by the time they reach the pay grade of E-5, 68 percent of all active-duty enlisted personnel are married (54 percent in the Navy, 59 percent in the Marine Corps, 70 percent in the Army, and 82 percent in the Air Force). Eitelberg states that 43 percent of all enlisted personnel have both a spouse and a child. As a natural result of these demographic changes, the military is forced to address issues of day care, effects of geographic instability on families, dependent housing and education, increased costs for medical care, expanded family service demands, and the special needs of dual-service couples and single parents [Ref. 14:p. 29]. Inability on the part of service members to cope with competing demands of family and career can result in poor performance on the job and a higher rate of turnover. Faced with the loss of highly trained service members, the military is now making an effort to integrate the family into its system.

Segal has studied this interaction of the military and the family. She notes that they both "make great demands on individuals in term of commitments, loyalty, time, and energy; thus they are 'greedy' institutions." [Ref. 3:p. 9] She defines the greedy military institution as one where individual commitment and self-sacrifice are achieved through a shared-value system which demands obedience and tireless loyalty. In return, the military offers enticing family compensations—job security, free housing, free medical and dental care, educational benefits, and a host of other payments in kind. Traditionally, the family has altered its needs to support the demands of the military. More recently, however,

demographic shifts are causing changes in family structure which conflict with the greedy military— increasing market work by wives, increases in number of single parents, rapidly rising marriages in the enlisted ranks, and military-military marriages are resulting in increased tensions between the family institution and the military institution [Ref. 3:p. 13]. The presence of women in uniform has changed the dynamics of military service in many ways:

- Military women have the same limited control over their geographic location as men have had, and this makes them less able to meet family responsibilities.
- Military women are less likely than military men to be married and have children.
- Military women are more likely than military men to be separated from their spouses, thus cutting off that means of support.
- The number of dual-service couples is growing rapidly and presents assignment difficulties for military detailers.
- Single parents (both divorced and never married) are on the rise, and these unique family units receive limited traditional support. [Ref. 3:p. 28]

Single parents in the military are treated in the same manner as other military personnel. They receive no preferential treatment and are expected to carry out all military duties and remain assignable worldwide. If they fail to meet these criteria, they are subject to involuntary discharge. DoD estimates that there are between 53,000 and 72,000 single parents on active duty [Ref. 27]. Single parents are often viewed as a liability to unit readiness because they may “inadvertently create problems in their units and extra work for their fellow servicemembers

because of their parental responsibilities." [Ref. 27] Yet, current manpower shortages dictate that they remain in uniform.

Women enter the military service for the same reasons as men—for upward mobility, education, travel, and adventure. Women are thought to be even more committed than men because they have been socialized to put group needs over personal needs [Ref. 3:p. 33].

Bowen [Ref. 28] studied the effects of quality-of-life benefits on the job satisfaction and reenlistment intentions of Army personnel. He hypothesized that increased satisfaction with family environment would result in greater overall satisfaction with the military as a way of life, which would increase reenlistment [Ref. 28:p. 574]. Among his enlisted sample, he found that satisfaction with family environment significantly predicted overall satisfaction with military service. Only in enlisted households with a civilian spouse and no children was family environment not significant. Although Bowen did not separate his sample by gender, he suggests that for females, satisfaction with the military as a place to raise children could be the most significant predictor of satisfaction with the military. Family policies which are seen as restrictive may lower satisfaction with military service and increase turnover [Ref. 28:p. 589].

Military service has long been seen as particularly appealing to minorities, especially blacks, due to their comparatively more limited opportunities in the civilian labor market. Binkin and Eitelberg [Ref. 29] report that since blacks can expect to earn less than whites in the civilian work force, the military pay scales are more attractive to blacks than

to whites [Ref. 29:p. 77]. The military is seen as a path of upward mobility, and blacks are more likely than whites to make the military a career. Trends for Hispanics and Asian/Pacific Island minorities are more difficult to track since definitions have changed over the years [Ref. 29:p. 81].

Women's choice of occupational field is hypothesized by Waite and Berryman to be a dynamic process that begins in childhood and continues throughout life [Ref. 30:p. 1]. Decisions to work/not work and decisions to work in traditional or nontraditional fields can be influenced by socioeconomic status, work history of parents, and level of educational attainment. Job commitment and job turnover are seen as by-products of a woman's preferences and of her market alternatives.

Women who plan continuous labor force participation throughout their adult lives may also make choices which minimize their domestic responsibilities (by postponing marriage, bypassing marriage altogether, having a small family, or eliciting equal child-rearing support from spouse). Conversely, women who view marriage and motherhood as more important than a career are expected to work in a traditional female occupation [Ref. 30:p. 6].

Since level of education can be seen as a proxy for marketability in the workplace, those women who anticipate uninterrupted careers should be more likely to invest in advanced education.

Initial job choices can be influenced by both a girl's socioeconomic status and by the type of role models in the family. The educational level of the mother can act as an indicator of both. Waite and Berryman found that the daughters of mothers who completed less than 12 years of

education were more likely to choose traditional occupations than the daughters of mothers who completed 12 or more years of formal schooling.

### **III. METHODOLOGY/PRESENTATION OF DATA**

#### **A. DATA SOURCE**

The data used in this analysis were extracted from the 1985 DoD Survey of Officer and Enlisted Personnel, which surveyed approximately 132,000 officer and enlisted personnel serving on active duty as of 30 September 1984. This survey was conducted by the Defense Manpower Data Center (DMDC) for the Office of the Assistant Secretary of Defense (Force Management and Personnel) and represents the second large-scale survey effort to gather information on the active duty military population. A similar study was conducted in 1978. The data allow study of responses by military members regarding:

- changes in military pay/compensation
- factors affecting readiness/retention
- projected behavior of military personnel in response to possible changes in personnel management
- differences in career orientations, attitudes, and experiences between members of different subgroups (i.e., minorities, men, women)
- demographic, familial, and other characteristics of military personnel, couples, and families, including special groups such as dual-career couples and single-parent families
- impact of military policies on aspects of military and family life, such as residential arrangements, continuing education, and spousal employment, and family well-being, including economic issues facing military families
- demand for, and use and perceived adequacy of, programs providing family services [Ref. 4:p. 2-1]

The reenlistment behavior of women is the central focus of this thesis. To assess the factors affecting women's staying behavior, the reenlistment decisions of both males and females will be examined to ascertain whether second-term military women as a whole behave differently from their male counterparts. Four subgroups, each representing different marital/familial orientation, will then be created from the global female model:

- single women without children (SNC)
- single women with children (SC)
- married women without children (MNC)
- married women with children (MC)

Initial comparisons will be made of all males and all females to determine whether gender-specific differences exist. Next, the all-female group will be subdivided into married (with and without children) and single (with and without children) subcomponents to test whether marital status affects reenlistment behavior. In addition, the all-female group will again be subdivided into women with children (married and single) and women without children (married and single) to see whether dependency status exerts a differential impact on staying behavior. Finally, the all-female group will be broken down into the four targeted components—SC, SNC, MC, and MNC—and these will be compared to test how each marital/familial factor affects subsequent reenlistment decisions.

Although each group described above differs in gender, marital status, family status, or a combination thereof, they are homogeneous in that they serve in all four services, have between 49 and 108 months of



service, are serving in their second enlistment, and are ranked between pay grades E3 and E7. In addition, only those service members who were within three years or less of their end of obligated service were included, hence all service members were eligible to leave active duty by December 1988. The imposition of these restrictions results in reduced samples representing all second-term enlisted females and males from the Army, Navy, Air Force, and Marine Corps. A listing of these second-term enlisted personnel is presented by subgroup in Table 1.

TABLE 1  
**SAMPLE SIZE OF SELECTED SECOND-TERM ENLISTED PERSONNEL**

<b>Definition</b>	<b>Number of Observations</b>
all males & all females	8,916
all males	5,244
all females	3,672
single with children	442
single, no children	815
married with children	1,554
married, no children	861
all single women	1,257
all married women	2,415
all women with children	1,996
all women with no children	1,676

Turnover behavior was examined using an actual longitudinal reenlistment measure (STATUS). DMDC matched the 1985 survey with personnel records to obtain information on the subsequent reenlistment behavior of the sample. This variable denotes existing military status

(active, nonactive, nonactive reserve, and retired) as of 31 December 1988. Responses which contained either incomplete responses or questions skipped entirely were treated as missing values.

## **B. METHODOLOGY**

### **1. Statistical Method**

Since the reenlistment outcome is dichotomous (stay, leave), the logit model was selected to estimate the probability that a service member will choose to remain in the military past the second term of enlistment. Logit analysis estimates how the probability of reenlistment is related to a set of explanatory variables. The logit model is explained by the cumulative logistic probability function: if  $P_i$  is the probability of staying/leaving and  $X_1, X_2, \dots, X_n$  is defined as a set of professional, economic, or personal characteristics or attributes, then the general equation can be expressed as

$$\begin{aligned} P_i &= \text{Prob (individual } i \text{ stays given characteristics } X_1, \dots, X_n) \\ &= \text{Prob } (Y_i = 1 | X_1, \dots, X_n) \\ &= \frac{1}{1 + e^{-\beta_j x_j}} \end{aligned}$$

The logit model provides estimated values for the  $\beta$ s.

Because the data are at the individual level, maximum likelihood estimation is used and parameters are estimated iteratively. The logistic properties of the error term (dependent variable approaches unity at slower and slower rates as  $X_i$  gets very large) and the fact that the

sample is large, with many replicated observations, make logit the regression analysis technique of choice.

## **2. Variables**

### **a. *Dependent Variable(s)***

The dependent variable used to measure a service member's post-survey decision to stay or leave the military was constructed by DMDC as the variable "STATUS." This variable was created by matching each survey respondent to subsequent reenlistment data. The actual reenlistment decisions of the respondents were coded as follows:

- if respondent was still serving on active duty as of 31 December 1988, then he/she is coded as one, or a "stayer";
- if respondent has left active duty and did/did not join the Reserves, he/she is counted as zero, or a "leaver";
- respondents recorded as having retired from active duty are deleted from the study.

This matched data set not only provides a unique opportunity to analyze the actual reenlistment decisions of various groups of survey respondents but also allows a direct comparison of intent to actual decisions. The majority of analysis in this thesis addresses the actual reenlistment decisions of the aforementioned subgroups. A separate section of Chapter IV will be devoted to matching intent and actual behavior, with an assessment of the relative strengths of association, based on gender, marital status, and family status.

Mobley [Ref. 8] stated that the intent to stay or leave an organization was a strong indicator of actual turnover behavior. To make this subsequent comparison, a second dependent variable is defined as a

measure of an individual's original intent to reenlist at the end of his/her obligated service. This dependent variable, "INTENT," was taken directly from a survey question which asked respondents, "How likely are you to reenlist at the end of your current term of service?" The variable INTENT was constructed as follows:

- respondents answering "certain" (11), "almost sure" (10), "very probable" (9), or "probable" (8) were coded as one, or "reenlisters";
- respondents answering "no chance" (1), "very slight possibility" (2), "slight possibility" (3), or "I plan to leave the service" (6) were coded as zero, or "leavers";
- respondents answering "some possibility" (4), "fair possibility" (5), "fairly good possibility" (6), or "good possibility" (7) were deleted in an effort to accentuate the relationship between respondents' stated reenlistment intent and subsequent behavior. Responses four through seven provided little indication of intended staying behavior.

A comparison of reenlistment intent responses (1985) and actual reenlistment status (1988) for all groups is presented in Table 2.

#### ***b. Independent Variables***

The explanatory variables used to analyze reenlistment behavior include demographic, economic, job, personal, and tenure influences on behavior. A set of "generic" independent variables—those which are hypothesized to affect the reenlistment decisions of all groups, irrespective of marital/familial status, were chosen for the comparative analysis. The variables selected from the 1985 DoD survey are listed in Table 3 and are described below.

**TABLE 2**  
**COMPARISON OF REENLISTMENT INTENT (1985) AND**  
**ACTUAL REENLISTMENT (1988), ALL GROUPS**  
(in percentages)

<b>Group</b> <b>Status</b>	<b>ALLMALES</b> n=5244	<b>ALLFEMS</b> n=3672	<b>SC</b> n=442	<b>SNC</b> n=815	<b>MC</b> n=1554	<b>MNC</b> n=861	<b>EVERYBOD</b> n=8916
<b>INTENT</b> to remain on active duty	57.0	52.8	58.2	50.7	54.1	49.4	55.3
<b>ACTUAL</b> reenlist- ment	63.0	58.8	63.5	54.0	60.0	58.8	61.2
<b>CHANGE</b>	6.0	6.0	5.3	3.3	5.9	9.4	5.9

- Notes:**
1. Actual reenlistment status analysis does not include individuals who are listed as "retired from active duty."
  2. Reenlistment intent analysis does not include responses "don't know," "I plan to retire," "question not answered," or previously deleted responses (4) through (7). Numbers for intent and status do not match because of above deleted responses.
  3. n used is for actual reenlistment variable. Due to differences in variable construction, intent variable n is 84-90% of actual variable n.

**TABLE 3**  
**EXPLANATORY VARIABLES, ALL GROUPS**

<b>Variable</b>	<b>Definition</b>
MINORITY	categorical; 1 = minority, 0 = Caucasian
MOMSED	continuous; 1 through 20 years of education
ARMY	categorical; 1 = Army, 0 = other
NAVY	categorical; 1 = Navy, 0 = other
USMC	categorical; 1 = USMC, 0 = other
CURRED	continuous; 1 through 20 years of education
TRADFEM	categorical; 1 = traditional job, 0 = nontraditional job
CIVALTER	continuous; 1 = no chance, 11 = certain
PAYGRADE	discrete; E3 through E7
JOBSAT	discrete; 1 = very dissatisfied, 5 = very satisfied
MILSAT	discrete; 1 = very dissatisfied, 5 = very satisfied
BENEFITS	discrete; 1 = very dissatisfied, 5 = very satisfied
MILSPOUS	categorical; 1 = military spouse, 0 = other
INCOME	discrete; 1 = delighted, 7 = terrible

The influence of minority status was captured by a dichotomous variable, MINORITY, derived from five racial/ethnic group categories:

1. American Indian/Alaskan National
2. Black/Negro/Afro-American
3. Oriental/Asian/Chinese/Japanese
4. White/Caucasian
5. Other

This variable was recoded as a dummy variable with white/Caucasian as the base case and all other responses denoting minority status. This variable should reflect the differences in taste for military service between

Caucasian and minority respondents. It is hypothesized that minority women in all categories will have higher reenlistment levels; this effect should be most pronounced for those women who have children. As discussed before, minority employment and advancement opportunities are often greater in the military than in the civilian work force.

Mother's educational level (MOMSED) was used to test the impact of the mother's educational level on the future career orientation of the son or daughter. It is hypothesized that the more educated the mother, the more likely the daughter is to seek out and maintain a career, either to the exclusion of or in addition to family responsibilities. Waite and Berryman [Ref. 30] found that more-educated women have a higher tendency to seek nontraditional employment (the higher the mother's education level, the higher should be a daughter's commitment to a military career).

A set of dummy variables was used for branch of service. Use of these variables in the models should reveal differential reenlistment behavior (if it exists) at the end of obligated service, based on the respondent's branch of service. It is hypothesized that the branch of service will have a significant impact on reenlistment decisions, based on the arduousness or sea/overseas characteristics inherent in certain branches which may be minimal or absent in others.

The current education (CURRED) of a respondent was used to capture the effects of human capital investments on staying behavior. The variable is treated as a continuous one, with increased education hypothesized to decrease the probability of reenlistment, because

alternate civilian opportunities will be wider. It is anticipated that as level of educational attainment increases, reenlistment likelihood will decrease. Men and women with no children are hypothesized to show the greatest decrease in reenlistment behavior with increased educational attainment because their relative lack of family commitments allow them greater job flexibility.

The impact of a respondent's specific occupational category on reenlistment was tested with a dichotomous variable TRADFEM. The "standard" DoD military occupational categories are listed in Table 4. These job categories can be broken down into "traditional" or "nontraditional" areas, as was done by Eitelberg [Ref. 31:p. 166]. Medical and dental and support and administration occupations are widely viewed as traditional fields. In this restricted sample, 12.4 percent of women work in medical and dental fields and 44.5 percent work in support and administration. By comparison, only 21.3 percent of males were reported as working in both fields. It is hypothesized that, among all women, women with no children will be most heavily represented in the nontraditional fields; their greater flexibility and relative lack of family commitments better allow both more irregularity in working hours and more work performed in nonconventional settings. Conversely, those women with children should be distributed more heavily in the traditional fields.

- If a respondent works in medical, dental, support, or administrative fields, the variable TRADFEM takes the value of one.
- If, on the other hand, a respondent works in a field categorized as nontraditional, TRADFEM equals zero.



TABLE 4  
**DOD MILITARY OCCUPATIONS**

<b>Occupational Category</b>	<b>Traditional</b>	<b>All Male Sample %</b>	<b>All Female Sample %</b>
Direct Combat	no	14.2	2.4
Electronic Equipment Repair	no	13.4	6.3
Communications & Intelligence	no	10.0	13.5
Medical & Dental	yes	3.7	12.7
Other Technical	no	2.9	3.4
Support & Administrative	yes	17.6	43.7
Electrical/Mechanical Equipment Repair	no	25.5	7.4
Crafts	no	3.9	1.9
Service & Supply	no	8.4	8.5
Nonoccupational	no	0.3	0.1

To assess the impact of perceived civilian job alternatives on reenlistment, the continuous variable CIVALTER was used. Respondents were asked how likely they would be to find a *good* civilian job if they left the service. Responses were scaled from one ("no chance") to 11 ("certain"). Mobley [Ref. 8] contends that links exist between being dissatisfied with a job and actually quitting. These links include thinking about quitting, looking for another job, intending to quit, and actually doing it. Favorable perception of alternate employment is viewed as a precursor of quit behavior. Increasing values for CIVALTER should result in decreased reenlistments. It is anticipated that men and women without children will perceive their civilian job alternatives more favorably than women with children.

The effects of tenure and promotion on staying behavior were examined using pay grade as an explanatory variable. PAYGRADE is a discrete variable, restricted to E3 through E7 only. Because people who

remain in service tend to achieve higher rank, pay grade captures "tenure" effects. In most literature, tenure is found to be negatively associated with turnover behavior, presumably because individuals have completed a "job matching" process and are content in their present career. Employees who do not feel that they have made a good match will quit; workers who decide they have made a good choice will exhibit lowered quit rates and, subsequently, job tenure rises [Ref. 5]. Because this sample is restricted to second-term military, a large degree of homogeneity already exists. Still, as pay grade rises, respondents should have greater financial and professional impetus to remain on active duty.

There are numerous variables in the survey concerning various facets of satisfaction. These include satisfaction with work conditions, military lifestyle, and quality of payment-in-kind incentives or benefits. In order to capture their effects on reenlistment, yet maintain a parsimonious set of explanatory variables, factor analysis was used. The goal of factor analysis is to explain as much of the total variance in the satisfaction indicators as possible without using excessive numbers of variables. Three explanatory variables (JOBSAT, MILSAT, and BENEFITS) resulted from this procedure. Job satisfaction (JOBSAT) for the global female group was measured by analyzing women's responses to the following survey questions (the alphabetical identifiers for each of the 18 satisfaction questions are noted in parentheses):

- level of satisfaction with job (J)
- level of satisfaction with co-workers (C)
- level of satisfaction with work conditions (N)

- level of satisfaction with job training (L)
- level of satisfaction with job security (M)
- level of satisfaction with friendships (B)
- level of satisfaction with personal freedom (A)
- level of satisfaction with serving your country (I)

High levels of satisfaction should result in increased propensity to reenlist. Conversely, the more distaste expressed for the above aspects of the job, the more likely people are to choose civilian employment at the end of obligated service. Muchinsky and Tuttle [Ref. 7] found this negative effect in their research on job satisfaction and turnover. In their review of 39 job satisfaction studies, they reported a  $-.4$  correlation between satisfaction and turnover.

Satisfaction with the military as a way of life (MILSAT) was constructed from the following variables:

- level of satisfaction with frequency of moves (G)
- level of satisfaction with assignment stability (D)
- level of satisfaction with pay and allowances (E)
- level of satisfaction with retirement plan (H)
- level of satisfaction with family environment (F)

The five satisfaction factors listed above are unique aspects of the military institution. Segal [Ref. 3] differentiates these stability and family aspects of a military lifestyle—geographic mobility, deployment, separations, residence in foreign countries, and normative constraints on behavior—as powerful influences on the loyalty and commitment of military members. In addition, Bowen [Ref. 29] notes that few civilian

employers can compete with the generous range of economic benefits inherent in military careers—retirement after 20 years of service, stable pay, housing allowances, tax advantages, etc. Together, these MILSAT factors should exert considerable influence on staying behavior. It is anticipated that increased satisfaction with the military institutional framework will result in higher reenlistment levels, especially among service members who are married and married with children.

The effect of payments in kind (BENEFITS) on staying behavior was tested using the following variables:

- level of satisfaction with medical care (P)
- level of satisfaction with dental care (Q)
- level of satisfaction with commissary services (R)
- level of satisfaction with VEAP benefits (O)

The military's comprehensive benefits package provides free (or minimal cost) care to all dependents (spouse and/or children). Although Locke [Ref. 32] reports that benefits do not have a strong influence on overall satisfaction with work for most people, BENEFITS was included in this analysis to ascertain how powerful its impact would be for specific groups. The impact of BENEFITS on reenlistment behavior should be positive for all groups. It is further hypothesized that this effect will be greatest for single women with children and, to a lesser extent, for married women with children. Factor analysis was conducted for the all-male, all-female, SC, SNC, MC, and MNC groups. The analysis showed nearly identical factor patterns. These patterns are outlined in Table 5.

TABLE 5

**SATISFACTION VARIABLE FACTOR ANALYSIS PATTERNS**

Variable	Group	ALLMALES	ALLFEMS	SC	SNC	MC	MNC
<b>JOBSAT</b>							
Personal freedom		A	A	A	A	A	A
Friendships		B	B	B	B	B	B
Co-workers		C	C	C	C	C	C
Serve country		I	I	I	I	I	I
Happy with job		J	J	J	J	J	J
Promotions		K	K	K		K	K
Job training		L	L	L	L	L	L
Job security		M	M	M	M	M	M
Work conditions		N	N	N	N	N	N
Stability					D		
<b>MILSAT</b>							
Stability		D	D	D		D	D
Pay		E	E	E	E	E	E
Family environ.		F	F	F	F	F	F
Moving		G	G	G	G	G	G
Retirement		H	H		H	H	H
Promotions					K		
<b>BENEFITS</b>							
VEAP		O	O	O	O	O	O
Medical care		P	P	P	P	P	P
Dental care		Q	Q	Q	Q	Q	Q
Commissary		R	R	R	R	R	R
Retirement				H			

In order to capture the effect that having a military spouse would have on reenlistment behavior, the dummy variable MILSPOUS was constructed.

- If a respondent indicates that he/she has a current spouse, and that his/her spouse is serving on active duty, then MILSPOUS equals one.
- If a respondent has no current spouse, or has a civilian spouse, MILSPOUS equals zero.

The armed forces expend considerable effort to collocate their military couples and enjoy a collocation average in excess of 90 percent. Dual-service couples enjoy high assignment and pay stability, and perhaps increased camaraderie associated with joint service. For these reasons, it is hypothesized that the presence of a military spouse will exert a strong positive effect on women's reenlistment behavior. Forty-two percent of the married female respondents report a military spouse, compared to only six percent of the male sample population, so the effect of the military spouse should appear only for the female samples.

To determine the effect total family income has on turnover behavior, a variable INCOME was created. The variable is formatted on a Likert scale, with one denoting "delighted" and seven representing "terrible." Unlike a simple pay variable, in which decreased satisfaction is associated with increased turnover [Ref. 15], this income variable should reflect differential financial satisfaction among one- versus two-paycheck households. Specifically, it is designed to test whether single women (usually one-paycheck families) are less satisfied with their overall financial status than married women (presumably two-paycheck families), and

whether this global income variable affects reenlistment levels. It is hypothesized that the one-paycheck subgroups will express the most dissatisfaction but that childless women will be the most prone to act on this dissatisfaction if it exists.

### **3. The Models**

Using the aforementioned candidate variables, a model of all eligible female service members was estimated. As a basis for comparison, a similar model of the reenlistment behavior of males was also estimated, using the same explanatory variables. The factor analysis for all men showed factor patterns identical to that of the all-female group. Next, the global female model was broken down into its four subcomponents and individual models of each of these subgroups were constructed.

These basic models of reenlistment behavior are a function of the following variables:

Reenlistment = f(PAYGRADE, MINORITY, MOMSED, BRANCH OF  
SERVICE, CURRED, TRADFEM, CIVALTER,  
JOBSAT, MILSAT, BENEFITS, MILSPOUS, INCOME)

A summary of the expected results for each variable for each group is presented in Table 6.

TABLE 6

## SUMMARY OF SIGNS OF EXPECTED RESULTS BY SUBGROUP

Variable	Group	ALLMALES	ALLFEMS	SC	SNC	MC	MNC
MINORITY		+	+	+	+	+	+
MOMSED		-	+	+	+	+	+
ARMY		-	-	-	-	-	-
NAVY		-	-	-	-	-	-
USMC		-	-	-	-	-	-
CURRED		-	-	-	-	-	-
TRADFEM		+	+	+	+	+	+
CIVALTER		-	-	-	-	-	-
PAYGRADE		+	+	+	+	+	+
JOBSAT		+	+	+	+	+	+
MILSAT		+	+	+	+	+	+
BENEFITS		+	+	+	+	+	+
MILSPOUS		+	+	•	•	+	+
INCOME		+	+	+	+	+	+



## **IV. ANALYSIS**

### **A. ESTIMATION OF REENLISTMENT BEHAVIOR**

The actual reenlistment rates were computed for the six subgroups (all males, all females, single women with children, single women without children, married women with children, and married women without children). The highest reenlistment rate was observed for the single with children group (64 percent), followed by all males (63 percent), married with children (60 percent), all females (59 percent), married without children (59 percent), and single without children (54 percent). Surprisingly, single and married women with children were more likely to remain in the military than their counterparts without children. In addition, males exhibited the highest reenlistment rate of all groups except for single women with children. The results of the logit analysis are discussed below.

### **B. RESULTS OF LOGIT ANALYSIS**

Logit regression analysis was conducted for all males, all females, and for the four targeted subgroups of females. A summary of results for all six groups is presented in Table 7.

#### **1. "Common" Results**

Six of the 14 explanatory variables (MINORITY, MOMSED, ARMY, CURREN, CIVALTER, and PAYGRADE) had the same pattern of

TABLE 7

## SUMMARY OF RESULTS, ALL GROUPS

Group Variable	ALLMALES n=5244	ALLFEMS n=3672	SC n=442	SNC n=815	MC n=1554	MNC n=861	EVERYBOD n=8916
MINORITY	*** +	*** +	*** +	*** +	*** +	** +	*** +
MOMSED	NS -	NS +	NS +	NS -	NS +	NS +	NS +
ARMY	*** -	*** -	** -	*** -	** -	* -	*** -
NAVY	*** -	* -	* -	NS -	NS -	NS -	*** -
USMC	*** -	*** -	** -	NS +	** -	*** -	*** -
CURRED	NS -	NS -	NS +	NS -	NS -	NS -	NS -
TRADFEM	** +	* +	*** +	NS -	NS +	NS +	NS +
CIVALTER	*** -	*** -	** -	*** -	*** -	*** -	*** -
PAYGRADE	*** +	*** +	*** +	*** +	*** +	*** +	*** +
JOBSAT	*** +	*** +	NS +	** +	*** +	*** +	*** +
MILSAT	** +	*** +	NS +	** +	*** +	NS +	*** +
BENEFTS	*** +	NS +	NS +	NS +	NS +	NS +	*** +
MILSPOUS	NS -	*** +	-	-	** +	* +	NS -
INCOME	* -	NS -	NS -	NS +	NS -	NS -	*** -
* = significant at .10 or better ** = significant at .05 or better *** = significant at .01 or better NS = not significant							

statistical significance for all subgroups. These six "common" variables are discussed first, followed by a discussion of pertinent differential results for each subgroup.

**a. Minority Status (MINORITY)**

Minority status was highly significant for all groups. As discussed in Chapter II, minority service members see military service as a vehicle for upward mobility, anticipate potential pay discrimination in

the civilian sector, and thus are more likely than non-minorities to make a career of military service.

**b. *Mother's Education (MOMSED)***

Mother's educational level failed to predict reenlistment behavior significantly for any group. The mean educational level of the mother for all groups was 12.0 years. Previous research indicated that the role model characteristics of the mother affect a daughter's initial career choice, and that increasing levels of maternal education often result in subsequent increased commitment by the daughter to continuous labor force participation [Ref. 30]. This latter effect was not observed for this second-term enlisted female sample.

**c. *Serving in the U.S. Army (ARMY)***

In all cases, serving in the Army resulted in significantly lower reenlistment levels. This effect was most pronounced for males and for single women without children. This finding of lower reenlistment levels for Army women is at odds with that of Waite and Berryman [Ref. 33:p. 18]. Their research found that no branch of service was better or worse than any other service in its retention of women. Compared to the base case (Air Force), reenlistment in the Army appears to be the least attractive reenlistment option across all groups. The Army's inability to reenlist similar proportions of sample respondents for their third term of service is cause for concern.

**d. *Current Educational Level (CURRED)***

Across all groups, current level of education of respondent failed to explain variance in reenlistment decisions. This is possibly due

to a lack of variation in this variable due to military entrance selection procedures. In total, only 1.4 percent of all males and females sampled had less than 12 years of education.

Another possible reason for the lack of statistical significance for the *CURRED* variable may be tied to a respondent's educational aspirations. According to Waite and Berryman [Ref. 33:p. 23], a major reason that young males and females enter the military in the first place is to achieve educational goals—the military is renowned for providing high-caliber training and generous off-duty educational benefits. Increasing educational attainment may be counteracted by this desire to fulfill educational aspirations while on active duty—service members stay precisely to meet these educational goals.

***e. Perception of Civilian Alternatives (CIVALTER)***

A survey respondent's perception of alternate civilian opportunities was significant in all groups in explaining variations in reenlistment behavior. The more confident the respondent was of his or her chances of finding a good civilian job, the more likely he or she was to leave the military at the end of obligated service. Among these groups, the males were the most confident that they could find a good civilian job, and the single women with children were least confident.

***f. Present Pay Grade (PAYGRADE)***

As expected, increasing pay grade resulted in an increased likelihood of remaining on active duty at the end of the contract. This second-term group had already chosen to stay in the armed forces once (at the completion of an initial enlistment) and had already accrued eight

or more years in a military career by 31 December 1988 (when actual reenlistment status was computed). As pay grade increased, these members enjoyed the increasing financial and professional dividends of their current occupation and were more likely to remain on active duty to continue to enjoy the benefits of this career investment.

***g. Remaining Variables***

The remaining eight explanatory variables (NAVY, USMC, TRADFEM, JOBSAT, MILSAT, BENEFITS, MILSPOUS, INCOME) had differential explanatory power and levels of statistical significance across groups, dependent on gender, marital status, and/or dependency status. These variables are discussed by their effects on each subgroup below.

**2. "Differential" Results**

***a. Serving in the U.S. Navy (NAVY)***

This branch-of-service variable was consistently negative across all groups and explained a significant portion of the variance in reenlistment behavior for three of the six groups— all males, all females, and single women with children. Arguably, the Navy, with its arduous sea/shore rotation of assignments, would present the greatest difficulties in balancing job and family commitments. Single women with children are often forced to "farm out" their children to grandparents or other civilian guardians or to leave military service altogether. For both single and married women without children, and for married women with children, Naval service did not significantly reduce reenlistment levels. Existing Navy policy stipulates that for dual-service couples with dependents, one service member may elect (and must be granted) shore duty while

the other military spouse is at sea. Dual-service Navy couples with children may therefore be more capable of juggling their professional and family responsibilities than Navy single parents [Ref. 34].

**b. Serving in the U.S. Marine Corps (USMC)**

Service in the Marine Corps had a significant negative impact on the staying behavior of all groups with the exception of single women without children. For this group, service in the Marine Corps had a positive (but not significant) impact on staying behavior. Waite and Berryman contend that, for women

[S]tereotypically, the Marine Corps is seen as the most traditionally male of the four military branches because women make up a substantially smaller proportion of its force than any other service—we predict increased turnover among Marine Corps women. [Ref. 33]

In contrast, of all groups of women, the single woman without children is conceivably most able to compete on separate but equal physical and emotional footing with the male Marines, may enjoy the acceptance and *esprit de corps* of her male counterparts, and may therefore exhibit lower turnover than women with competing family objectives.

**c. Traditional Occupation (TRADFEM)**

Occupational category significantly affected the reenlistment decisions of all males, all females, and single women with children. The job categories labeled as traditional (medical, dental, support, and administration) not only have high female representation but also offer training which is often highly transferable to the civilian sector. These jobs also usually provide regular work schedules and pleasant work conditions. Thus, they have high appeal to males as well as females, and to

single women with children, whose sole parenting responsibilities might render them unable to cope with aspects of more "nontraditional" jobs (long and irregular hours, high deployment status, high risk of injury). The explanatory variable TRADFEM had no significant impact on the reenlistment decisions of either single or married women without children or for married women with children. These subgroups, by virtue of either their lack of family responsibility or the presence of a spouse to offer support, may be better prepared to take on more demanding non-traditional occupational roles.

**d. *Satisfaction with Job (JOBSAT)***

Satisfaction with aspects of the working environment (job itself, co-workers, work conditions, training, security, etc.) had positive and significant explanatory power for five of the six groups. This finding is consistent with the bulk of turnover research, which contends that the more satisfied/dissatisfied people are with their jobs, the more likely they are to stay/quit. In contrast, job satisfaction/dissatisfaction did not explain the variation in reenlistment decisions of single women with children. It was surprising to find that although this group of respondents had the highest reenlistment level of all groups (64 percent), satisfaction with the job contributed insignificantly to their decision to stay. Reasons other than a "fulfilling" job were causing these women to remain on active duty. Muchinsky [Ref. 11:p. 426] states that job satisfaction is a better predictor of turnover in good economic times. In a poor economy, workers would rather accept a dissatisfying job than face unemployment. Single women with children may be facing a similar dilemma—they

perceive less-than-ideal civilian job alternatives and subsequently remain in the military because better jobs may not exist.

***e. Satisfaction with Military Environment (MILSAT)***

Increasing satisfaction with factors unique to the military as a way of life (PCS moves, assignment stability, pay/allowances, retirement plan, family environment) had a positive effect on reenlistment levels for all groups but failed to reach statistical significance for two groups—single women with children and married women without children. Again, single mothers apparently chose to reenlist for reasons other than satisfaction with the military as a way of life—assignment instability and frequent PCS moves often inflict particular hardship on the single parent. Satisfaction with the military lifestyle also contributed insignificantly to an explanation of the staying behavior of married women without children; the reasons for this effect are not clear.

***f. Satisfaction with Military Benefits (BENEFITS)***

This attitudinal variable measured a respondent's level of satisfaction with medical, dental, commissary, and VEAP benefits, and was significant for the all-male group only. Although benefits packages alone often do not result in more-satisfied workers/lower turnover, it was expected that single women with children who have no spouse benefits coverage would value their military benefits to a significant degree. The failure of a generous benefits package to significantly increase the reenlistment of single women with children may be due to economic reasons. Wages provide greater economic utility to workers than do benefits because they offer greater discretion and flexibility than do payments in



kind. Employees who are young, poor, or present-oriented may prefer higher wages over non-cash compensation packages [Ref. 2:p. 403]. For this reason, single women with children may not view their military benefits package as a major incentive to remain on active duty.

***g. Military Spouse (MILSPOUS)***

This measurement of the impact of a military spouse on reenlistment behavior was positive and significant for the all-female group (41.7 percent military spouse), married women with children (64.1 percent military spouse), and married women without children (62.6 percent military spouse). Since only 6.1 percent of the males reported having a military spouse, there was no expected effect for this group. Dual-service couples are collocated when possible per service assignment policies; this employment and assignment security likely contribute to their increased retention.

***h. Satisfaction with Total Income (INCOME)***

This variable measured respondents' satisfaction with their total family income and was insignificant in explaining reenlistment for all groups except males. The income variable was constructed so that increasing value denoted greater levels of satisfaction with total family income. Males who reported greater overall satisfaction with their financial status exhibited a lower probability of remaining on active duty. Theoretically, overall financial satisfaction should lead to higher reenlistment levels.

To verify whether this effect was due to a sample phenomenon or to misspecification of the income variable, mean income was

calculated for the actual stayers and leavers in the male sample. The mean income value for stayers equaled 3.90, whereas the mean value for leavers equaled 3.79. Thus, the overall effect for males is that higher level of income satisfaction results in a greater rather than lower reenlistment level.

Secondly, a test was run to see whether an interaction between the marital status of males and income satisfaction existed. Perhaps males with high-earning spouses would be happier with family income **and** more willing to quit because they had the security of their wives' incomes. To test this, males were broken into four subgroups—married stayers and leavers and single stayers and leavers. If this interaction were present, married male stayers would have a lower mean income satisfaction than married male leavers, but single male stayers would have a *higher mean income satisfaction than single male leavers*. Mean income satisfaction levels were computed, but the mean income satisfaction for married stayers still exceeded that of married leavers. For the single men, stayers also exhibited a higher mean satisfaction with their income level. Finally, a correlation table was run which listed the correlations between marital status for males and all other variables. Correlations were low: the highest correlation existed between marital status and the military spouse variable. The male sample consisted of 72.5 percent married members and 27.5 percent single members. The sign and significance of this income variable cannot be explained by the limited investigation into this male model—correlation analysis found a relatively high negative correlation between the income variable and the

civilian alternative variable, so perhaps this income variable is misspecified. Since this thesis focuses on female reenlistment behavior and marital/dependent status, further analysis of this anomaly for males will be left to others.

The individual logit regression analysis results for each subgroup are presented in Tables A through E in Appendix A.

### **C. MODEL COMPARISONS**

As can be seen from the summary of results for all groups in Table 7, differences in reenlistment behavior do exist by subgroup. Qualitative statements can be made about the reenlistment behavior of one group compared to another. To quantitatively determine whether the groups are indeed different, and should be estimated by separate regression models, or whether they are essentially the same, and only a single model is required, further analysis is necessary. A series of Chow-like tests was computed to ascertain the applicability of separate or universal models for second-term reenlistment behavior based on the gender/marital/familial status of the groups.

The null hypothesis for these tests is that the coefficients of any given model are equal to the coefficients of other model(s) to which it is being compared. The test statistic used for the model comparison of all males and all females is:

$$F_{(k, N_1 + N_2 - 2k)} = \frac{\frac{(ESS_r - ESS_{ur})}{k}}{\frac{ESS_{ur}}{(N_1 + N_2 - 2k)}}$$

where

- $k$  = the number of variables including intercept;
- $N_1$  = the number of observations for the all-male group;
- $N_2$  = the number of observations for the all-female group;
- $ESS_T$  = the error sum of squares computed from maximum likelihood logit regression on the total pooled (male and female) samples; and
- $ESS_{ur}$  = the sum of error sum of squares from the individual male and female maximum likelihood logit regressions.

If the computed F statistic is greater than the critical F value from the F distribution ( $k$  and  $N_1 + N_2 - 2k$  degrees of freedom), then the null hypothesis that the all-male and all-female groups are essentially equal is rejected, and separate reenlistment models must be estimated [Ref. 35]. For this first Chow-like test (as shown in Table 8), the null hypothesis was rejected, meaning that the reenlistment behavior of males and females is different enough to warrant separate regression models.

This Chow-like test was estimated for 10 other groups of second-term service members based on various combinations of gender, marital status, and/or dependency status. Results are presented in Table 8 and briefly explained below. Letters in parentheses denote whether comparisons involve males and females or females only.

#### **1. Marital and Dependent Status (F)**

This four-way Chow test indicates that the four female subgroups are unique and cannot be accurately assessed with a single, pooled, all-female regression model.

TABLE 8  
SUMMARY OF RESULTS, ALL GROUPS  
(Chow-Like Test)

Group Comparison			Significance Level	Separate Models?
<b>GENDER (M&amp;F)</b>	Males n=5244 Females n=3672		***	yes
<b>MARITAL AND DEPENDENT STATUS (F)</b>	Single, children n= 442 Single, no children n= 815 Married, children n=1554 Married, no children n= 861		***	yes
<b>MARITAL STATUS (F)</b>	Married women n=2415 Single women n=1257		NS	no
<b>DEPENDENT STATUS (F)</b>	Women w/children n=1996 Women w/o children n=1676		*	yes
<b>SINGLE ONLY (F)</b>	Women w/children n= 442 Women w/o children n= 815		***	yes
<b>MARRIED ONLY (F)</b>	Women w/children n=1554 Women w/o children n= 861		NS	no
<b>NO DEPENDENTS ONLY (F)</b>	Single women n= 815 Married women n= 861		*	yes
<b>DEPENDENTS ONLY (F)</b>	Single women n= 442 Married women n=1554		**	yes
<b>NO DEPENDENTS ONLY (M&amp;F)</b>	All men n=5244 Women w/o children n=1676		***	yes
<b>DEPENDENTS ONLY (M&amp;F)</b>	All men n=5244 Women w children n=1554		***	yes
<b>MARITAL AND DEPENDENT STATUS (M&amp;F)</b>	Single women w/o children n= 815 All men n=5244		***	yes
Note: *** = significant at .01 or better ** = significant at .05 or better * = significant at .10 or better NS = not significant				

## **2. Marital Status (F)**

Marital status in and of itself does not differentiate women sufficiently to warrant separate regression models.

## **3. Dependent Status (F)**

As hypothesized, the presence of children does differentiate service members in their reenlistment behavior. Women with children should be modelled separately from women without children.

## **4. Single: Dependent Status (F)**

Single women with children require a separate reenlistment behavior model from single women without children, in support of the central hypothesis.

## **5. Married: Dependent Status (F)**

A single model can be used to explain the reenlistment behavior of both married women with children and married women without children. This finding does not support the hypothesis that the presence of children results in unique turnover behavior.

## **6. Dependents: Marital Status (F)**

The reenlistment behavior of single women with children is different enough from that of married women with children to require two reenlistment models. Because 64.1 percent of the married women with children in this sample reported that their spouse was also an active-duty service member, their dual-service status may alter their actual reenlistment decisions significantly.

### **7. Dependents: Gender Status (M and F)**

Women without children are different enough from all males to warrant separate reenlistment models.

### **8. Dependents Only (M and F)**

Women with children are not similar to males in their reenlistment behavior.

### **9. Marital and Dependent Status (M and F)**

Of all groups tested, single women without children were most strongly expected to mirror males in their reenlistment decisions. The Chow test did not support this claim. It is possible that if males were segregated by their marital/dependency status as well, there would be no marked differences.

## **D. VALIDATION OF REENLISTMENT BEHAVIOR MODELS**

The probability of an individual respondent choosing to reenlist in the military at the end of obligated service can be computed from his or her regression equation. For example, the reenlistment probability of a single woman without children can be computed as follows:

$$\begin{aligned} \text{REEN} = & -.654 + .633 (\text{MINORITY}) - .008 (\text{MOMSED}) - .523 (\text{ARMY}) \\ & - .046 (\text{NAVY}) + .089 (\text{USMC}) - .16 (\text{CURRED}) \\ & - .077 (\text{TRADFEM}) - .077 (\text{CIVALTER}) + .359 (\text{PAYGRADE}) \\ & + .189 (\text{JOBSAT}) + .235 (\text{MILSAT}) + .057 (\text{BENEFITS}) \\ & - .011 (\text{INCOME}) \end{aligned}$$

By substituting the survey responses of an individual single woman without children into this regression equation, a reenlistment probability for an individual is obtained. The average reenlistment values are computed from the sum of these individual reenlistment rates.

As a measure of the overall goodness of fit of the logit models, an R statistic [Ref. 36] was calculated. This R statistic is similar to the multiple correlation coefficient, with a correction made to penalize for the number of explanatory variables being estimated. R is computed as follows:

$$R^2 = (\text{model chi-square} - 2p)/(-2L(0))$$

where

p = the number of parameters in the model

L(0) = maximum log-likelihood with only intercepts in the model

R<sup>2</sup> = the proportion of log-likelihood explained by the model

R can range from 0 to 1; as R increases in value, the predictive ability of the model also increases.

The computed R values for the six sample groups are listed below.

all males	R = .274
all females	R = .246
single no children	R = .139
married no children	R = .220
single with children	R = .304
married with children	R = .267

R is best used as a general guideline for assessing the predictive ability of a model. From the above statistics, it is clear that the overall fit for models including children is better than that for models not including children. The 14 chosen explanatory variables did not explain as much variation in the reenlistment of women without children. This may be due to a lack of data on the events (perhaps marriage/childbirth/change in



jobs) which occurred between administration of the survey in 1985 and assessment of reenlistment status at the end of 1988. This lack of complete information limits the predictive ability of these models.

The logit regression procedure computes predicted probabilities and these may be compared with actual reenlistment rates. Since logit also computes the mean reenlistment rates for each group (as previously presented in Table 2), these mean values are used as cut-off points to ascertain the success rate for a given logit model. For example, 54 percent of single women with no children actually reenlisted. Thus, 54 percent is used as a success/failure criterion for the model; individual cases where the predicted probability exceeds 54 percent are counted as reenlisters.

These predicted reenlistment values can be matched to the actual reenlistment values for each group to determine the accuracy of each logit model. These actual and predicted values for the six groups are presented in Table 9. The percent correctly classified (as stayers or leavers) ranges from a low of 59.9 percent for single women without children to a high of 68.8 percent for single women with children. The lower accuracy rate of the single-without-children model indicates that variables other than those modelled affect the reenlistment behavior of these women. Complete contingency results for all six groups of respondents are presented in Table G in the appendix. In all cases, the logit model predicted a lower reenlistment percentage than would have been predicted without the use of models.

TABLE 9

**ACTUAL STATUS VS. PREDICTED STATUS, ALL GROUPS**

(in percentages)

<b>Group</b>	<b>Actual Reenlistment</b>	<b>Predicted Reenlistment</b>	<b>Correctly Classified</b>
All Males	63.0	55.2	63.1
All Females	58.8	53.2	62.6
SC	63.5	53.9	68.8
SNC	54.0	50.1	59.9
MC	60.0	54.7	64.7
MNC	58.8	55.1	64.2

## **V. CONCLUSIONS AND RECOMMENDATIONS**

### **A. RESULTS**

This thesis examined the reenlistment behavior of 8,916 male and female second-term enlisted personnel who responded to the 1985 DoD Officer and Enlisted Personnel Survey. The actual reenlistment status as of 31 December 1988 of all survey respondents was merged with the data set to provide information on the reenlistment behavior of those surveyed. A turnover model with 14 attitudinal, economic, and demographic explanatory variables was developed. Males and females were also compared to see how patterns of reenlistment differed by gender. The 3,672 female respondents were broken into four subgroups based on their marital/dependency status to determine whether these factors would differentiate women's turnover behavior.

Logit regression analysis was conducted for the all-male group, for all females, and for the four targeted female subgroups (single without children, single with children, married without children, and married with children). Resultant models were then compared to one another using a Chow-like test to see whether significant differences existed between groups based on gender, marital, and/or familial status which would warrant separate turnover models. Results indicated that the presence of children did result in unique reenlistment behavior. This effect appeared when comparing all women with children to all women without children and when comparing single women with children to

single women without children. However, the presence of children did not significantly differentiate the turnover behavior of married women with children from that of married women without children. Since 41.7 percent of all second-term enlisted women (and 63 percent of married women) are married to fellow service members, this may be due to an interaction effect between the presence of a military spouse and the presence of children in the family which may have attenuated the impact of dependency status on reenlistment behavior—an effect which was not present for the single samples.

The models were validated in two ways. As a measure of overall goodness of fit, an R statistic (a rough guideline of the predictive ability of a model) was computed. R can range from 0 to 1, with increasing values indicative of better model fit (similar to the multiple correlation coefficient). R ranged from a low of .139 for single women without children to a high of .330 for single women with children. The explanatory variables chosen did well in predicting the reenlistment behavior of women with children, but not as well for models not including children.

Mean reenlistment rates were also computed for each group and used as cut-off values in a logit classification table—individual values exceeding this mean reenlistment likelihood were classified as stayers; those below this mean were counted as leavers. Using this criterion, the logit models correctly predicted between 60 and 70 percent of actual leavers and stayers.

The results of this thesis can improve understanding of the underlying differences in behavior exhibited by second-term female service

members. These individuals are homogeneous in that they have chosen to remain in active service once but still exhibit some behavioral differences based on their current family status. Different stages in a person's life cycle (single, married without children, married with children) elicit different individual needs and desires. These factors, whether they be directly related to satisfaction with the job or are indirect expressions of a need for job flexibility or financial security, can exert considerable influence on morale, performance, and subsequent decisions to stay or leave the military.

Certain variables used in the turnover models had a consistent effect on all groups, regardless of their gender or family status—current pay grade, perception of civilian job alternatives, minority status, and branch of service (Army) affected all groups in a similar manner and were significant across all groups. Other factors were highly influential for some but showed no significance for others. Traditionality of occupational category, job satisfaction, satisfaction with the military lifestyle, and satisfaction with benefits are some examples of differential factors. For example, single women with children showed greater reenlistment probability when in a traditional female job, but their reenlistment behavior was unaffected by measures of job satisfaction, satisfaction with the military lifestyle, or military benefits.

## **B. IMPLICATIONS**

Certain reenlistment incentives motivate some groups of service members and not others. Manpower planners can more accurately assess the viability of current policies and target future personnel

policies toward retaining those categories of individuals who demonstrate the highest performance and/or productivity at the lowest cost to the services if they are cognizant of these differences. The military expends billions of dollars annually in selection, indoctrination, compensation, and training costs, and often cannot recoup the investment before turnover occurs. These dollars are most wisely spent on those service members who exhibit a combination of superior ability and propensity to remain on active duty.

Among sample females, single and married women **with** children reenlisted at higher rates (64 percent and 60 percent, respectively) than did single and married women **without** children (54 percent and 59 percent). Economic research generally shows that women exhibit higher job turnover than men, due in part to lower pay, lower levels of education, and interruptions due to child rearing. In this military sample, females reenlisted at a rate of 59 percent compared to males at 63 percent—not as marked a difference as exists in the civilian work force. Pay equality, combined with the significant training investments made in women, probably encourages them to stay in uniform.

When comparing reenlistment intent to actual reenlistment behavior, males and females both stayed at rates that exceeded their purported intent by six percent. Among subgroups, single women without children most closely followed their stated intentions with their actual behavior. This may be due to their relative ease in making career decisions unencumbered by family considerations. Hence, projections of the future force strength and reenlistment predictions for these single, unattached

service members may be most accurate. In contrast, married women without children expressed the lowest level of intent yet displayed one of the highest subsequent reenlistment levels. This disparity suggests that manpower planners may not be as accurate when trying to assess future force levels for this group. Their behavior is less predictable— they appear not to be committed to one particular career plan.

The presence of children may shift the priorities of the active-duty mother from strictly a career orientation to a mixture of professional aspirations coupled with increased emphasis on support for her family, day-care issues, and desire for flexible work schedules. These competing considerations may exert a powerful impact on a woman's choice to remain on active duty or leave the Armed Forces at the end of her obligated service.

Dealing with active-duty mothers in the military is but one of many quality-of-life issues with which the services are currently struggling. The changing demographics of military manpower are resulting in shifts in service-member priorities in many areas, including medical benefits, housing, and family support issues. If the services fail to satisfy these emerging needs of the married/parent enlisted force, young talent may be compelled to seek civilian jobs, taking expensive skills and training along.

Shifting population numbers also mean that, at least in the early 1990s, there may not be a sufficient supply of upper-mental-group, high-school-graduate males to fill military jobs. Since there are generally more women desiring to enter the services than there are quotas available, the

use of women may have to be increased to meet DoD manpower goals. As recruiting resources dwindle, the services are forced to lower their average attrition levels (which were acceptable when replacement recruits were readily available) to counteract the paucity of new recruits. For these reasons, the services may be compelled to adapt current policies to meet the needs of nontraditional family units such as single parents.

Today's military also calls for higher intelligence, skill levels, and technical experience than ever before. Women, who typically meet or exceed aptitude standards, may be called on to fill these gaps. Shortages of male manpower, a competitive civilian job market, and a stable economy all accentuate the need for the services to keep already-trained resources—the replacement costs and resulting shortages in critical skills would be too costly.

### **C. FURTHER STUDY**

Achieving a balance between required skill levels and projected retainability of second-term service members into their third enlistment will require continuing analysis of attitudes and trends in the youth and military markets. The DoD survey, by compiling current attitudinal, demographic, and economic data, provides valuable insight into the changing needs of the military work force and should be readministered periodically. As the composition of the military continues to shift, the services need to be able to modify their standards and procedures to meet these changing demands.

A more valid and comprehensive assessment of the effects of marital and dependency status on reenlistment could be made if the male



sample were also segregated into subgroups. Direct comparison (i.e., single males with children and single women with children) would be done, and more generalizable results would result.

The addition of information on individuals during the time gap between survey administration in 1985 and reenlistment status at the end of 1988 would provide greater understanding of the causes of turnover. For example, data on change in marital status, birth of first or additional children, promotion to higher pay grade, and/or change in type of duty assignments could increase the predictive ability of the turnover model by explaining a larger amount of the variation in the reenlistment decision.

APPENDIX  
LOGIT RESULTS

TABLE A  
MALE REENLISTMENT BEHAVIOR  
(ALLMALES/n=5244)

Variable	Coefficient/SE		SIG Level
MINORITY	.416	.07	.001
MOMSED	-.015	.013	NS
ARMY	-.513	.098	.001
NAVY	-.599	.096	.001
USMC	-.859	.091	.001
CURRED	-.011	.028	NS
TRADFEM	.175	.077	.022
CIVALTER	-.079	.012	.001
PAYGRADE	.646	.049	.001
JOBSAT	.408	.038	.001
MILSAT	.103	.044	.021
BENEFITS	.107	.039	.006
MILSPOUS	-.017	.131	NS
INCOME	.049	.028	.078

**TABLE B**  
**ALL FEMALE REENLISTMENT BEHAVIOR**  
 (ALLFEMS/n=3672)

<b>Variable</b>	<b>Coefficient/SE</b>		<b>SIG Level</b>
MINORITY	.744	.082	.001
MOMSED	.018	.014	NS
ARMY	-.377	.090	.001
NAVY	-.176	.099	.076
USMC	-.495	.144	.001
CURRED	-.029	.029	NS
TRADFEM	.126	.071	.078
CIVALTER	-.098	.013	.001
PAYGRADE	.626	.065	.001
JOBSAT	.275	.043	.001
MILSAT	.228	.051	.001
BENEFITS	.059	.047	NS
MILSPOUS	.234	.073	.001
INCOME	.053	.033	NS

**TABLE C**  
**SINGLE WITH CHILDREN REENLISTMENT BEHAVIOR**  
(SC/n=442)

<b>Variable</b>	<b>Coefficient/SE</b>		<b>SIG Level</b>
MINORITY	1.20	.250	.001
MOMSED	.040	.043	NS
ARMY	-.598	.289	.038
NAVY	-.571	.313	.068
USMC	-1.017	.436	.020
CURRED	.081	.118	NS
TRADFEM	.837	.221	.001
CIVALTER	-.094	.040	.020
PAYGRADE	.876	.200	.000
JOBSAT	.193	.138	NS
MILSAT	.228	.154	NS
BENEFITS	.120	.134	NS
MILSPOUS	—	—	—
INCOME	.001	.108	NS

TABLE D  
**SINGLE NO CHILDREN REENLISTMENT BEHAVIOR**  
 (SNC/n=815)

<b>Variable</b>	<b>Coefficient/SE</b>		<b>SIG Level</b>
MINORITY	.633	.176	.001
MOMSED	-.008	.029	NS
ARMY	-.523	.198	.008
NAVY	-.047	.192	NS
USMC	.089	.291	NS
CURRED	-.016	.055	NS
TRADFEM	-.077	.150	NS
CIVALTER	-.077	.028	.006
PAYGRADE	.359	.133	.007
JOBSAT	.189	.089	.035
MILSAT	.235	.113	.038
BENEFITS	.057	.087	NS
MILSPOUS	—	—	—
INCOME	-.011	.072	NS

**TABLE E**  
**MARRIED WITH CHILDREN REENLISTMENT BEHAVIOR**  
(MC/n=1554)

<b>Variable</b>	<b>Coefficient/SE</b>		<b>SIG Level</b>
MINORITY	.877	.129	.001
MOMSED	.011	.022	NS
ARMY	-.318	.142	.025
NAVY	-.092	.161	NS
USMC	-.506	.226	.025
CURRED	-.021	.049	NS
TRADFEM	.048	.113	NS
CIVALTER	-.086	.021	.001
PAYGRADE	.730	.104	.001
JOBSAT	.381	.068	.001
MILSAT	.270	.077	.001
BENEFITS	.060	.068	NS
MILSPOUS	.298	.117	.011
INCOME	.053	.051	NS

TABLE F  
**MARRIED NO CHILDREN REENLISTMENT BEHAVIOR**  
(MNC/n=5244)

<b>Variable</b>	<b>Coefficient/SE</b>		<b>SIG Level</b>
MINORITY	.362	.173	.037
MOMSED	.046	.028	NS
ARMY	-.330	.182	.070
NAVY	-.254	.212	NS
USMC	-1.18	.328	.001
CURRED	-.086	.058	NS
TRADFEM	.135	.149	NS
CIVALTER	-.126	.028	.001
PAYGRADE	.679	.137	.001
JOBSAT	.312	.089	.001
MILSAT	.058	.106	NS
BENEFITS	-.039	.091	NS
MILSPOUS	.285	.152	.061
INCOME	.104	.069	NS

TABLE G

## ACTUAL STATUS VS. PREDICTED STATUS ALL GROUPS

## ALL MALES

Actual Status	Predicted Status		n
	Leave	Stay	
	60.7%	30.8%	
Stay	39.3%	69.2%	3325
n	2349	2895	5244
% correctly classified = 67.6%			

## ALL FEMALES

Actual Status	Predicted Status		n
	Leave	Stay	
	59.3%	34.5%	
Stay	40.7%	65.5%	2159
n	1724	1948	3672
% correctly classified = 62.7%			

## SINGLE WITH CHILDREN

Actual Status	Predicted Status		n
	Leave	Stay	
	64.0%	27.5%	
Stay	36.0%	72.5%	280
n	204	238	442
% correctly classified = 68.8%			

## SINGLE NO CHILDREN

Actual Status	Predicted Status		n
	Leave	Stay	
	59.2%	38.5%	
Stay	40.8%	61.5%	437
n	407	408	815
% correctly classified = 59.9%			

## MARRIED WITH CHILDREN

Actual Status	Predicted Status		n
	Leave	Stay	
	62.1%	31.7%	
Stay	37.9%	68.3%	938
n	704	850	1554
% correctly classified = 64.7%			

## MARRIED NO CHILDREN

Actual Status	Predicted Status		n
	Leave	Stay	
	63.2%	32.7%	
Stay	36.8%	67.3%	504
n	387	474	861
% correctly classified = 66.1%			



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